STATEMENT OF BASIS (AI No. 2419)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0034509 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Ventura Foods, LLC - Lou Ana Division
Lou Ana Plant
P.O. Box 591
Opelousas, LA 70571-0591

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Ronda Burtch

DATE PREPARED: April 5, 2010

1. PERMIT STATUS

A. Reason for Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. LPDES permit – LA0034509
LPDES permit effective date: June 1, 2004
LPDES permit expiration date: May 31, 2009

LPDES permit – LAR05M426
LPDES permit effective date: May 23, 2006
LPDES permit expiration date: April 30, 2011

C. Date Application Received: December 2, 2008

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - vegetable oil refining facility

Ventura Foods, LLC / Lou Ana Plant is a edible oil refinery that produces vegetable oils for resale. The facility refines corn oil, sunflower oil, soybean oil, cottonseed oil, peanut oil, safflower oil, coconut oil, and canola oil to produce refined vegetable oil and hydrogenated vegetable oil products. Products are packaged for retail sale and export. Products are packaged on–site or shipped in bulk, railcars. The facility has an operating capacity of up to about 480 tons/day (350,000,000 lbs/year).

The wastewater treatment facility treats the process wastewater generated from refining vegetable oils, as well as non-contact cooling water, cooling tower blowdown, steam condensate, interior tank car washwater, floor and equipment washdown water, and stormwater runoff.

Outfall 002 is an emergency stormwater relief outfall and would only be used in emergencies where discharge is necessary to protect the facility property.

The sanitary wastewater from this facility is routed to the local POTW. Stormwater that is not commingled with process water is discharged under LPDES multi-sector general permit LAR05M426.

B. FEE RATE
1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC code: 2079

C. LOCATION - 731 Railroad Avenue in Opelousas, St. Landry Parish
Latitude 30° 32' 26", Longitude 92° 05' 21"

3. OUTFALL INFORMATION

OUTFALL 001

Discharge Type: process wastewater, non-contact cooling water, cooling tower blowdown, steam condensate, interior tank car washwater, floor and equipment washdown water, and stormwater runoff

Treatment: oil/water separation, equalization/surge tanks, dissolved air flotation (DAF) unit, biological treatment in aerated lagoon, and clarification. The stormwater runoff is pumped from the stormwater pump station into the storm water tank, then into the aerated lagoon followed by clarification.

Location: at the point of discharge, from the metering structure, near the final clarifiers, prior to mixing with other waters

Flow: 0.6 MGD

Discharge Route: unnamed ditch, thence into Bayou Tesson

OUTFALL 002

Discharge Type: emergency discharge of diverted excess stormwater runoff

Treatment: oil/water separator

Location: at the point of discharge, from the oil/water separator, near the stormwater pump station, prior to mixing with other waters

Flow: intermittent

Discharge Route: unnamed ditch, thence into Bayou Tesson

4. RECEIVING WATERS

STREAM - unnamed ditch, thence into Bayou Tesson

BASIN AND SEGMENT - Vermilion-Teche Basin, Segment 060801

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
f. agriculture

5. TMDL STATUS

Subsegment 060801, Vermilion River - From headwaters to LA-3073 bridge, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen (NITRATE + NITRITE as N), organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, and Carbofuran, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 060801:

1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen

This TMDL was finalized January 19, 2001 and established a loading capacity equal to the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen*. This TMDL estimated the necessary reduction in nonpoint source loadings to accelerate progress toward full support of the DO standard. Since the TMDL did not require reductions in point source loadings, no additional permit requirements are included. However, individual point sources in the Vermilion Watershed should continue to be issued on the basis of flow rates as follows:

FLOW RATE	PERMIT LIMITS
greater than 25,000 gpd	May – Dec.: 10 mg/l $CBOD_5$/5 mg/l NH_3-N/5 mg/l DO Jan.- April: 20 mg/l $CBOD_5$/10 mg/l NH_3-N/5 mg/l DO
25,000 gpd or less	secondary limits year round

Additionally, in regard to nutrients such as nitrogen and phosphorous, LDEQ has determined that organic enrichment/low DO directly correlates with overall nutrient impact. Thus, when organic enrichment/low DO is limited (as with the established CBOD5/ NH3-N/ DO limits), LDEQ is also in effect limiting and controlling nutrient concentrations and impacts. Therefore, this discharge will be permitted accordingly.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin

As per the TMDL finalized May 3, 2001, "Point sources do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges of organic suspended solids from point sources are already addressed by LDEQ through there permitting of point sources to maintain water quality standards for TSS, the wasteload allocations for point source contributions were set to zero." Therefore, TSS limits are will be permitted according to current state water quality standards.

Vermilion River TMDL for Fecal Coliform

The *Vermilion River TMDL for Fecal Coliform* was finalized on April 5, 2001, addressing the presence of pathogen indicators in the watershed. As per this TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Since the sanitary wastewater from this facility is connected to the local POTW, fecal coliform limitations will not be required.

TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins

The *TMDL for Carbofuran in the Mermentau and Vermilion-Teche River Basins* was finalized on March 21, 2002. No allocation was given to point source discharges in the Vermilion Teche River Basin. According to the TMDL, there is only one point source in the Vermilion Teche (FMC Corp. LA0064360), but it no longer discharges Carbofuran. In addition, this facility has no potential to discharge Carbofuran. Therefore, requirements for Carbofuran will not be required of this facility.

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for Total Phosphorus will not be placed in this permit.

6. CHANGES FROM PREVIOUS PERMIT

1. Seasonal $CBOD_5$ and Ammonia-Nitrogen concentration and mass limitations have been added to the permit based on a TMDL for subsegment 060801.
2. BOD_5 has been replaced by $CBOD_5$ based on a TMDL for subsegment 060801.
3. Monthly average and daily maximum mass limitations have changed for TSS and Oil and Grease for Outfall 001.
4. Since stormwater that doesn't commingle with the process wastewater is permitted under LPDES general permit LAR05M426, the Storm Water Pollution Prevention Plan (SWPPP) requirement has been removed from the permit.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC

Enforcement Actions: There are no open enforcement actions for this facility. The last enforcement action, which is now closed, was administered against this facility on June 5, 1992.

Inspections: The most recent water inspection was performed on April 14, 2008 in response to numerous complaints of black smelly water in Bayou Tesson (EDMS Document number 36800116). A visual inspection of the discharge appeared fairly clear. There was a small amount of food grade oil present at the discharge point due to an upset at outfall 002 from a batch discharge, and also due to a small leak in the rail car area where loading is performed. However, on this date, the discharge from outfall 001 appeared compliant. A solid waste inspection was performed at this facility on December 10, 2008 (EDMS Document number 39186897).

B. DMR Review/Excursions – A review of the discharge monitoring reports (DMRs) for the period of July 1, 2007 through June 30, 2009, revealed the following violations:

Outfall 001

Date	Parameter	Reported Value	Permit Limits
January 2008	BOD_5, Monthly Avg Loading	87 lbs/day	63 lbs/day
	BOD_5, Daily Max Loading	108 lbs/day	95 lbs/day
	TSS, Monthly Avg Loading	211 lbs/day	104 lbs/day
	TSS, Daily Max Loading	366 lbs/day	156 lbs/day
	DO, Monthly Avg	1.5 mg/l	5.0 mg/l (min.)
February 2008	BOD_5, Monthly Avg Loading	209 lbs/day	63 lbs/day
	BOD_5, Daily Max Loading	318 lbs/day	95 lbs/day
	TSS, Monthly Avg Loading	267 lbs/day	104 lbs/day
	TSS, Daily Max Loading	370 lbs/day	156 lbs/day
March 2008	BOD_5, Monthly Avg Loading	165 lbs/day	63 lbs/day
	BOD_5, Daily Max Loading	302 lbs/day	95 lbs/day
	TSS, Monthly Avg Loading	229 lbs/day	104 lbs/day
	TSS, Daily Max Loading	416 lbs/day	156 lbs/day
	Oil & Grease, Daily Max Loading	75 lbs/day	62 lbs/day
April 2008	TSS, Daily Max Loading	161 lbs/day	156 lbs/day
July 2008	DO, Monthly Avg	4.8 mg/l	5.0 mg/l (min.)
September 2007	BOD_5, Daily Max Loading	114 lbs/day	95 lbs/day
December 2007	TSS, Monthly Avg Loading	137 lbs/day	104 lbs/day
	TSS, Daily Max Loading	210 lbs/day	156 lbs/day

Outfall 002

Date	Parameter	Reported Value	Permit Limits
April – June 2009	Oil & Grease, Daily Max.	45 mg/l	15 mg/l
September 2009	pH, Monthly Min.	5.3 s.u.	6.0 s.u. (min)
April 2008	TOC, Daily Max.	164 mg/l	50 mg/l
	Oil & Grease, Daily Max.	27 mg/l	15 mg/l
	pH, Monthly Min.	2.3 s.u.	6.0 s.u. (min)
	pH, Monthly Max.	4.5 s.u.	9.0 s.u. (max)
May 2008	Oil & Grease, Daily Max.	70 mg/l	15 mg/l
	pH, Monthly Min.	4.6 s.u.	6.0 s.u. (min)
August 2008	Oil & Grease, Daily Max.	94 mg/l	15 mg/l
September 2008	TOC, Daily Max.	391 mg/l	50 mg/l
	Oil & Grease, Daily Max.	3218 mg/l	15 mg/l

- **This facility was referred to Enforcement on March 4, 2010 for violations of their water permit.**

8. EXISTING EFFLUENT LIMITS

Outfall 001 – continuous discharge of process wastewater, non-contact cooling water, cooling tower blowdown, steam condensate, interior tank car washwater, floor and equipment washdown water, and stormwater runoff

Pollutant	Limitation				Monitoring Frequency
	Monthly Avg	Daily Max	Monthly Avg	Daily Max	
	lbs/day		mg/l		
Flow (MGD)	Report	Report	---	---	1/day
BOD_5	63	95	---	---	1/week
TSS	104	156	---	---	1/week
Oil & Grease	41	62	---	---	1/week
NH_3N	---	---	Report	Report	1/month
Dissolved Oxygen	---	---	5.0 (min)	---	1/week
pH (s.u.)	---	---	6.0 (min)	9.0 (max)	1/week

Outfall 002 – intermittent emergency discharge of diverted excess stormwater runoff

Pollutant	Limitation		Monitoring Frequency
	Monthly Avg	Daily Max	
	mg/L		
Flow (MGD)	Report	Report	1/day
TOC	---	50	1/quarter
Oil & Grease	---	15	1/quarter
pH (s.u.)	6.0 (min)	9.0 (max)	1/quarter

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Ventura Foods, LLC - Lou Ana Division / Lou Ana Plant

1. **Outfall 001** - process wastewater, non-contact cooling water cooling tower blowdown, steam condensate, interior tank car washwater, floor and equipment washdown water, and stormwater runoff (estimated flow is 0.6 MGD)

Pollutant	Limitation				Sample Type
	Monthly Avg	Daily Max	Monthly Avg	Daily Max	
	lbs/day		mg/l		
Flow (MGD)	Report	Report	---	---	Measure
$CBOD_5$ (May – December)	50	75	10	15	24-Hour Composite
$CBOD_5$ (January – April)	100	150	20	30	24-Hour Composite
NH_3N (May – December)	25	50	5	10	24-Hour Composite
NH_3N (January – April)	50	75	10	15	24-Hour Composite
TSS	150	225	---	---	24-Hour Composite
Oil & Grease	50	75	---	---	Grab
Dissolved Oxygen	---	---	5.0 (min)	---	Grab
pH (s.u.)	---	---	6.0 (min)	9.0 (max)	Grab

- **The use of any additives or corrosion inhibitors containing any of the 126 priority pollutants is prohibited.**

Treatment: oil/water separation, equalization/surge tanks, dissolved air flotation (DAF) unit, biological treatment in acrated lagoon, and clarification.

Monitoring Frequency: Flow shall be measured 1/day. $CBOD_5$, TSS, and NH3N shall be Oil & Grease, Dissolved Oxygen, and pH shall be measured 1/week.

Limits Justification:

Flow: Flow reporting is consistent with LAC 33.IX.2707.I.1.b.

$CBOD_5$: BOD_5 has been replaced by $CBOD_5$ and is based on the *1999 Review and Assessment of the 1987 Vermilion Watershed TMDL for Dissolved Oxygen.*

Ammonia-Nitrogen: Ammonia-nitrogen limitations are based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen.*

Dissolved Oxygen: The DO limitation is based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen* and the previous permit.

TSS: The TSS mass loading have been previously based on the LWDPS permit by BPJ, in which limits were based on similar existing facilities and the Vermilion River Wasteload Allocation, February 11, 1987 and set at BCT per basin plan. However, this facility was not included in the Vermilion River Wasteload Allocation, February 11, 1987. TSS limits are based on LAC 33.IX.5905.B, BPJ, and similar discharges.

Oil and Grease: Oil and Grease mass loading have previously been based on the old NPDES and LWDPS permits, in which the limits were based on similar existing facilities and the Vermilion River Wasteload Allocation, February 11, 1987 and set at BCT per basin plan. However, this facility was not included in the Vermilion River Wasteload Allocation, February 11, 1987. Oil & Grease limits are based on BPJ and similar discharges from other industrial facilities.

pH: The pH limitations are based on BPJ and the previous permit.

(See Section 5 above for detailed justification of CBOD, NH_3N, DO, and TSS limitations.)

BOD_5 limits have been replaced with $CBOD_5$ limits. TSS limits are less stringent than the previous permit. The previous permit should have incorporated the limits for $CBOD_5$ based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen* and TSS limits should have been based on LAC 33.IX.5905.B, BPJ, and similar discharges from other industrial facilities. Therefore, per LAC 33.IX.2707.L.2.a.ii.b, in the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under CWA Section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit. Except when ... the administrator determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under CWA Section 402(a)(1)(b).

To convert concentration to mass loading limits, the following calculation was used:

(pollutant concentration in mg/l) x (8.34 L-lbs/mg-MG-mg) x (effluent flow in MGD) = lbs/day

This facility is not subject to Effluent Limitations Guidelines for Transportation Equipment Cleaning, 40 CFR Part 442. In accordance with 40 CFR 442.b.1, this part does not apply to wastewaters associated with tank cleaning operated in conjunction with other industrial, commercial, or Publicly Owned Treatment Works (POTW) operations, provided that the cleaning is limited to tanks that previously contained raw materials, by-products, or finished products that are associated with the facility's on-site processes. Ventura Foods only cleans the interior of tanks that contained vegetable oils, and only either inbound for processing/use by them or outbound for sale. The wastewaters generated from the interior cleaning of the tanks are similar in nature to the wastewaters generated at the rest of the facility. All wastewaters from the refining process and interior tank cleaning enter an on-site treatment plant and are comparable in nature.

2. **Outfall 002** – intermittent emergency discharge of diverted excess stormwater runoff (estimated flow is variable and intermittent)

Pollutant	**Limitation**				**Sample Type**
	Monthly Avg	Daily Max	Monthly Avg	Daily Max	
	lbs/day		mg/l		
Flow	Report	Report	---	---	Estimate
TOC	---	---	---	50	Grab
Oil & Grease	---	---	---	15	Grab
pH, s.u.	---	---	6.0 (min)	9.0 (max)	Grab

Treatment: oil/water separator

Monitoring Frequency: Flow shall be estimated daily. TOC, Oil and Grease, and pH shall be monitored 1/quarter.

Limits Justification: Flow reporting requirements are based on LAC33.IX.2707.I.1.b. TOC, Oil & Grease, and pH limitations are based on LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6) and the previous permit.

BPJ Best Professional Judgement
BCT Best Conventional Pollutant Control Technology
s.u. Standard Units

NOTE
For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.